

**APPENDIX A**

**"MARKED UP" CLAIMS ILLUSTRATING THE AMENDMENTS MADE TO THE  
CLAIMS OF 08/459141 WITH ENTRY OF THIS AMENDMENT**

1. (Amended) An immunogenic composition [A vaccine] comprising a truncated, membrane-free derivative of a [membrane-bound] polypeptide comprising a membrane-binding domain and antigenic determinants capable of raising neutralizing antibodies against in vivo challenge by a pathogen, wherein said derivative: [being]

(a) is devoid of the membrane-binding domain whereby the derivative [polypeptide] is free of [said] membrane, and

(b) has [having] exposed antigenic determinants capable of raising neutralizing antibodies against in vivo challenge by the [a] pathogen, [, wherein the truncated polypeptide is a derivative of a glycoprotein of a herpes simplex virus type 1 or type 2, and the pathogen is herpes simplex type 1 and/or type 2.]

2. (Amended) An immunogenic composition [A vaccine] according to Claim 16 [1] wherein the derivative [truncated polypeptide] is a derivative of glycoprotein D.

3. (Amended) An immunogenic composition [A vaccine] according to Claim 16 [1] wherein the derivative [truncated polypeptide] is a derivative of glycoprotein C.

4. (Amended) An immunogenic composition [A vaccine] according to Claim 16 [1] wherein the derivative [truncated polypeptide] is a derivative of glycoprotein B. [C of a herpes simplex virus type 1 and/or type 2.]

5. (Amended) An immunogenic composition [The vaccine] according to Claim 16 [1] wherein said immunogenic composition [polypeptide] comprises a mixture of glycoproteins or glycoprotein derivatives.

6. (Amended) An immunogenic composition [The vaccine] according to Claim 5 wherein [in which] said mixture comprises glycoprotein C or a derivative thereof and glycoprotein D or a derivative thereof.

7. (Amended) An immunogenic composition [The vaccine] according to Claim 5 wherein said mixture comprises glycoprotein D or a derivative thereof.

8. (Amended) An immunogenic composition [The vaccine] according to Claim 7 wherein said mixture further comprises glycoprotein B or a derivative thereof.
  9. Canceled.
  10. (Amended) A method of producing an immunogenic composition [a vaccine] according to any one of Claims 1, 2, 3 or 4, said method comprising preparing a nucleic acid encoding said derivative [wherein DNA encoding said membrane-bound polypeptide is prepared lacking coding for membrane-binding domain], incorporating [the DNA] said nucleic acid into an expression vector, introducing said vector into [transfecting] a host cell [with said vector], and collecting the derivative [truncated polypeptide] as a secretion product.
  11. (Amended) A method according to Claim 10 wherein the [transfected] host cell is a stable eukaryotic cell line.
  12. (Amended) A method according to Claim 11 wherein the [transfected] host cell is a mammalian cell line.
  13. (Amended) A method according to Claim 11 [or Claim 12] wherein the cell line is deficient in the production of dhfr and the vector contains a dhfr selectable marker.
  14. (Amended) A method according to Claim 10 wherein the derivative [truncated polypeptide] is a glycoprotein D of herpes simplex virus type 1 or type 2.
  15. (Amended) A method according to Claim 14 wherein the derivative comprises [truncated polypeptide is restricted to] the first 300 amino acid residues of the glycoprotein D.
- Added:
16. An immunogenic composition according to Claim 1 wherein the derivative is a derivative of a herpes glycoprotein.
  17. An immunogenic composition according to Claim 16 wherein the derivative is a derivative of herpes simplex virus type 1 or type 2, and the pathogen is herpes simplex type 1 and/or type 2.
  18. An immunogenic composition according to Claim 16 wherein said derivative is produced in a stable eukaryotic cell line.
  19. An immunogenic composition according to Claim 18 wherein said cell line is a mammalian cell line.

20. An immunogenic composition according to Claim 2 wherein the derivative comprises the first 300 residues of glycoprotein D.
21. A method according to Claim 10 wherein the derivative is a derivative of glycoprotein C.
22. A method according to Claim 10 wherein the derivative is a derivative of glycoprotein B.
23. A nucleic acid encoding a truncated, membrane-free derivative of a polypeptide comprising a membrane-binding domain and antigenic determinants capable of raising neutralizing antibodies against in vivo challenge by a pathogen, wherein said derivative is:
  - (a) is devoid of the membrane-binding domain whereby the derivative is free of membrane, and
  - (b) has exposed antigenic determinants capable of raising neutralizing antibodies against in vivo challenge by the pathogen.
24. The nucleic acid of Claim 23 wherein the derivative is a derivative of a herpes glycoprotein.
25. The nucleic acid of Claim 24 wherein the derivative is a derivative of a glycoprotein of a herpes simplex virus type 1 or type 2, and the pathogen is herpes simplex type 1 and/or type 2.
26. An expression vector comprising a nucleic acid according to Claim 24.
27. A stable host cell comprising an expression vector according to Claim 26.
28. A host cell according to Claim 27 wherein the host cell is a eukaryotic cell.
29. A host cell according to Claim 28 wherein the host cell is a mammalian host cell.
30. A method of producing a truncated, membrane-free derivative of a polypeptide comprising a membrane-binding domain and antigenic determinants capable of raising neutralizing antibodies against in vivo challenge by a pathogen, said method comprising:
  - (a) culturing the host cell of Claim 27; and
  - (b) recovering the derivative from the culture.
31. An immunogenic composition comprising a truncated, membrane-free derivative of a polypeptide comprising a membrane-binding domain and antigenic determinants

capable of raising neutralizing antibodies against in vivo challenge by a pathogen, wherein said derivative:

- (a) is devoid of the membrane-binding domain whereby the derivative is free of membrane, and
- (b) has exposed antigenic determinants capable of raising neutralizing antibodies against in vivo challenge by the pathogen, wherein the pathogen is a virus.

32. An immunogenic composition comprising a truncated, membrane-free derivative of a polypeptide comprising a membrane-binding domain and antigenic determinants capable of raising neutralizing antibodies against in vivo challenge by a pathogen, wherein said derivative:

- (a) is devoid of the membrane-binding domain whereby the derivative is free of membrane, and
- (b) has exposed antigenic determinants capable of raising neutralizing antibodies against in vivo challenge by the pathogen, wherein said pathogen is a virus selected from the group consisting of herpes virus, influenza virus, foot and mouth disease virus, hepatitis virus, vesicular stomatitis virus and rabies virus.